REMARKS

Applicant is in receipt of the Office Action mailed December 8, 2005.

Claim Status

Claims 1-25 were pending prior to entry of the present amendment.

Claims 3, 18, and 25 are herein amended.

Claims 1-25 are now pending.

Double Patenting Rejection

Claims 1-25 were provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-38 of copending Application No. 10/673,087 (entitled "Distributed Multi-Sample Convolution"). Applicant has filed herewith a terminal disclaimer to overcome the rejection.

Objections

The drawings were objected to because they fail to show the feature "interface" from claims 3 and 18. The term "interface" has been deleted from claims 3 and 18.

Rejections Under Section 112

Claims 3 and 18 were rejected under section 112, as failing to comply with the written description requirement. The specification fails to describe the term "interface" from claims 3 and 18. The term "interface" has been deleted from claims 3 and 18.

Claim 25 was rejected under section 112, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 25 has been amended to replace the term "may be" with "is".

Art Rejections

Claims 1-5, 7-14, 18-19, and 21-25 were rejected under 35 U.S.C. §103(a) as being unpatentable over Wilson (USPN 5129092) in view of Deering et al. (USPN 6417861; hereinafter referred to as Deering).

Applicant respectfully traverses these 103 rejections.

Claim 1 recites:

A system for distributed convolution of stacked digital video data comprising:

a plurality of video data convolve units connected in a chain, wherein a video data
    convolve unit is operable to:
    receive video pixel data from a video output of a dedicated rendering unit;
    calculate partial convolution sums for a set of the video pixels that are
        located within a convolution kernel;
    receive accumulated partial convolution sums from a prior video data
        convolve unit in the chain, unless the video data convolve unit is
        the first video data convolve unit in the chain;
    add the calculated partial convolution sums to the previously accumulated
        partial convolution sums; and
    output new accumulated partial convolution sums to the next video data
        convolve unit in the chain, unless the video data convolve unit is
        the last video data convolve unit in the chain.

Neither Wilson nor Deering, either singly or in combination, teach or render obvious:

"a video data convolve unit is operable to: receive video pixel data from a video output of a dedicated rendering unit; calculate partial convolution sums for a set of the video pixels that are located within a convolution kernel".

In fact, there is no use of any of the terms "pixel", "render", "rendered pixels", or "convolution kernel" in Wilson. Therefore, Wilson does not teach or render obvious the limitations of claim 1.

The Examiner also states that: "Wilson fails to explicitly teach or suggest [that] the data input device 20 is a rendering unit".

The Examiner further states that "Deering teaches video data convolve units (170A-170D) [that] receive **pixel** data from rendering units (Fig. 3, rendering unit[s] 150A-150D)". However, Deering clearly identifies the output of the rendering units 150A-D as **samples** and specifically **not pixels** at col. 11, lines 18-22:

"In the embodiment of graphics system 112 shown in the figure [Fig. 3], however, **rendering units 150A-D calculate "samples" instead of actual pixel data**. This allows rendering units 150A-D to "super-sample" or calculate more than one sample per pixel."

Therefore, Applicant submits that claim 1 and its dependent claims are non-obvious and patentably distinguished over Wilson and Deering for at least the reasons given above.

Applicant further submits that the independent claims 7, 10, 14, and 22 and their dependent claims are also non-obvious and patentably distinguished over Wilson and Deering for at least the reasons given above in support of claim 1.
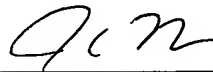
CONCLUSION

Applicant submits the application is in condition for allowance, and an early notice to that effect is requested.

If any extensions of time (under 37 C.F.R. § 1.136) are necessary to prevent the above referenced application(s) from becoming abandoned, Applicant(s) hereby petition for such extensions. If any fees are due, the Commissioner is authorized to charge said fees to Meyertons, Hood, Kivlin, Kowert & Goetzel PC Deposit Account No. 50-1505/5681-59600/JCH.

Also enclosed herewith are the following items:

☒ Return Receipt Postcard

☒ Terminal Disclaimer

Respectfully submitted,

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